

***FlyBy Math™* Alignment**  
**Mathematics Content Standards and Objectives**

**Standard 2: Algebra (MA.S.2)**

Students will:

- demonstrate understanding of patterns, relations, and functions;
- represent and analyze mathematical situations and structures using algebraic symbols;
- use mathematical models to represent and understand quantitative relationships; and
- analyze change in various contexts

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

**Algebra Objectives**

Students will:

AGP.2.1 substitute values, evaluate expressions involving variables, and calculate formulas to solve application problems.

***FlyBy Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Use the distance-rate-time formula to predict and analyze aircraft conflicts.

**Standard 4: Measurement (MA.S.4)**

Students will:

- demonstrate understanding of measurable attributes of objects and the units, systems, and processes of measurement; and
- apply appropriate techniques, tools and formulas to determine measurements

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

**Measurement Objectives**

Students will:

AGP.4.1 estimate, measure, and perform operations involving length, mass, and capacity using customary and metric units.

***FlyBy Math™* Activities**

--Conduct simulation and measurement for several aircraft conflict problems.

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

**Standard 5: Data Analysis and Probability (MA.S.5)**

Students will:

- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them;
- select and use appropriate statistical methods to analyze data;
- develop and evaluate inferences and predictions that are based on models; and
- apply and demonstrate an understanding of basic concepts of probability

through communication, representation, reasoning and proof, problem solving, and making connections within and beyond the field of mathematics.

<p><b>Data Analysis and Probability Objectives</b></p> <p>Students will:</p> <p>AGP.5.1 read, interpret, and construct graphs to solve problems.</p>	<p><b><i>FlyBy Math™</i> Activities</b></p> <p>--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.</p> <p>--Use tables, graphs, and equations to solve aircraft conflict problems.</p>
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